

General

Guideline Title

Antibiotic prophylaxis in gynaecologic procedures.

Bibliographic Source(s)

Van Eyk N, van Schalkwyk J, Infectious Diseases Committee. Antibiotic prophylaxis in gynaecologic procedures. J Obstet Gynaecol Can. 2012 Apr;34(4):382-91. [56 references] [PubMed](#)

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The quality of evidence (I-III) and classification of recommendations (A-L) are defined at the end of the "Major Recommendations."

Surgical Procedures

1. All women undergoing an abdominal or vaginal hysterectomy should receive antibiotic prophylaxis. (I-A)
2. All women undergoing laparoscopic hysterectomy or laparoscopically assisted vaginal hysterectomy should receive prophylactic antibiotics. (III-B)
3. The choice of antibiotic for hysterectomy should be a single dose of a first-generation cephalosporin. If patients are allergic to cephalosporin, then clindamycin, erythromycin, or metronidazole should be used. (I-A)
4. Prophylactic antibiotics should be administered 15 to 60 minutes prior to skin incision. No additional doses are recommended. (I-A)
5. If an open abdominal procedure is lengthy (e.g., >3 hours), or if the estimated blood loss is >1500 mL, an additional dose of the prophylactic antibiotic may be given 3 to 4 hours after the initial dose. (III-C)
6. Antibiotic prophylaxis is not recommended for laparoscopic procedures that involve no direct access from the abdominal cavity to the uterine cavity or vagina. (I-E)

Surgery for Pelvic Organ Prolapse and/or Stress Urinary Incontinence

7. All women undergoing surgery for pelvic organ prolapse and/or stress urinary incontinence should receive a single dose of first generation cephalosporin. (III-B)

Hysteroscopic Surgery

8. Antibiotic prophylaxis is not recommended for hysteroscopic surgery. (II-2D)

Induced (Therapeutic) Abortion

9. All women undergoing an induced (therapeutic) surgical abortion should receive prophylactic antibiotics to reduce the risk of postabortal infection. (I-A)

Missed or Incomplete Abortion

10. Prophylactic antibiotics are not suggested to reduce infectious morbidity following surgery for a missed or incomplete abortion. (I-E)

Office Procedures

Intrauterine Device Insertion

11. Antibiotic prophylaxis is not recommended for insertion of an intrauterine device. (I-E) However, health care professionals could consider screening for sexually transmitted infections in high-risk populations. (III-C)

Endometrial Biopsy

12. There is insufficient evidence to support the use of antibiotic prophylaxis for an endometrial biopsy. (III-L)

Hysterosalpingography

13. The best method to prevent infection after hysterosalpingography is unknown. Women with dilated tubes found at the time of hysterosalpingography are at highest risk, and prophylactic antibiotics (e.g., doxycycline) should be given. (II-3B)

Urodynamic Studies

14. Antibiotic prophylaxis is not recommended for urodynamic studies in women at low risk, unless the incidence of urinary tract infection post-urodynamics is >10%. (I-E)

Dosage Of Antibiotic Prophylaxis In Obese Patients

15. In patients with morbid obesity (BMI >35 kg/m²), doubling the antibiotic dose may be considered. (III-B)

Prevention Of Infective Endocarditis

16. Administration of antibiotics solely to prevent endocarditis is not recommended for patients who undergo a genitourinary procedure. (III-E)

Definitions:

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly randomized controlled trial

II-1: Evidence from well-designed controlled trials without randomization

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group

II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category.

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

Classification of Recommendations†

A. There is good evidence to recommend the clinical preventive action.

B. There is fair evidence to recommend the clinical preventive action.

C. The existing evidence is conflicting and does not allow to make a recommendation for or against use of the clinical preventive action; however, other factors may influence decision-making.

D. There is fair evidence to recommend against the clinical preventive action.

E. There is good evidence to recommend against the clinical preventive action.

L. There is insufficient evidence (in quantity or quality) to make a recommendation; however, other factors may influence decision-making.

†Adapted from the Classification of Recommendations criteria described in the Canadian Task Force on Preventive Health Care.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Infectious complications following gynaecologic surgical procedures, including

- Urinary tract infections
- Endometritis
- Wound infection
- Vaginal cuff cellulitis
- Perineal infection
- Sepsis

Guideline Category

Assessment of Therapeutic Effectiveness

Prevention

Clinical Specialty

Internal Medicine

Obstetrics and Gynecology

Surgery

Intended Users

Advanced Practice Nurses

Physician Assistants

Physicians

Guideline Objective(s)

To review the evidence and provide recommendations on antibiotic prophylaxis for gynaecologic procedures

Target Population

All women undergoing gynaecologic surgical procedures

Interventions and Practices Considered

Antibiotic prophylaxis

- First-generation cephalosporin
- Clindamycin, erythromycin, or metronidazole if allergic to cephalosporin

Major Outcomes Considered

- Need and effectiveness of antibiotics to prevent infections in gynaecologic procedures
- Morbidity and mortality

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Searches of Unpublished Data

Description of Methods Used to Collect/Select the Evidence

Medline and The Cochrane Library were searched for articles published between January 1978 and January 2011 on the topic of antibiotic prophylaxis in gynaecologic procedures. Results were restricted to systematic reviews, randomized control trials/controlled clinical trials, and observational studies. Searches were updated on a regular basis and incorporated in the guideline to June 2011. Grey (unpublished) literature was identified through searching the websites of health technology assessment and health technology assessment-related agencies, clinical practice guideline collections, clinical trial registries, and national and international medical specialty societies.

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Quality of Evidence Assessment*

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*Adapted from The Evaluation of Evidence criteria described in the Canadian Task Force on Preventive Health Care.

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

The quality of evidence obtained was rated using the criteria described in the Report of the Canadian Task Force on Preventative Health Care.

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Classification of Recommendations†

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Cost Analysis

The guideline developers reviewed published cost analyses.

A cost-effectiveness study looking at universal screening for sexually transmitted infections versus prophylactic azithromycin (1 g) showed that prophylactic treatment provided a significant cost savings.

Method of Guideline Validation

Internal Peer Review

Description of Method of Guideline Validation

This clinical practice guideline has been prepared by the Infectious Diseases Committee, reviewed by the Family Physician Advisory Committee, and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada.

Evidence Supporting the Recommendations

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Guideline implementation should result in a reduction of cost and related harm of administering antibiotics when not required and a reduction of infection and related morbidities when antibiotics have demonstrated a proven benefit.

Potential Harms

Development of antibiotic resistant organisms

Qualifying Statements

Qualifying Statements

This document reflects emerging clinical and scientific advances on the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level. None of these contents may be reproduced in any form without prior written permission of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Foreign Language Translations

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

Staying Healthy

IOM Domain

Effectiveness

Identifying Information and Availability

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Apr

Guideline Developer(s)

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

Source(s) of Funding

Society of Obstetricians and Gynaecologists of Canada

Guideline Committee

The Infectious Diseases Committee

Composition of Group That Authored the Guideline

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The literature searches and bibliographic support for this guideline were undertaken by Becky Skidmore, Medical Research Analyst, Society of

Financial Disclosures/Conflicts of Interest

Disclosure statements have been received from all members of the committee.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available in Portable Document Format (PDF) from the [Society of Obstetricians and Gynaecologists of Canada Web site](#)

. Also available in French from the [SOGC Web site](#) .

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada, La société des obstétriciens et gynécologues du Canada (SOGC) 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416

Availability of Companion Documents

None available

Patient Resources

None available

NGC Status

This NGC summary was completed by ECRI Institute on July 20, 2012. The information was verified by the guideline developer on August 15, 2012.

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